

IN THE CLAIMS:

1. (Currently Amended) A method of mapping an input image split into input triangles including texels onto an output image also split into corresponding output triangles including pixels, said method comprising the steps of:

determining an inverse affine transform for transforming an intermediate rectangle triangle into an input triangle;

determining a direct affine transform (FT) for transforming the intermediate rectangle triangle into an output triangle;

applying the inverse affine transform to intermediate points of the intermediate rectangle triangle so as to determine intermediate intensity values corresponding to said intermediate points on the basis of input intensity values of texels; and

applying the direct affine transform to the intermediate points so as to determine output intensity values of pixels on the basis of the intermediate intensity values;

wherein the step of applying the inverse affine transform is adapted to transform an intermediate point into an input transformed point in the input triangle, and to determine, for said intermediate point, an intermediate intensity value based on a filtering operation of texels surrounding the input transformed point and a distance therefrom; and

wherein said input transformed point in the input triangle is not located on a grid of texels with integer coordinates.

2. (Canceled)

3. (Previously Presented) A method as claimed in claim 1, wherein the filtering operation comprises a bilinear interpolation using four texels surrounding the input transformed point.

4. (Previously Presented) A method as claimed in claim 1, wherein the filtering operation comprises applying sequentially a first mono-dimensional finite impulse response filter in a horizontal direction and a second mono-dimensional finite impulse response filter in a vertical direction.

5. (Previously Presented) A method as claimed in claim 1, wherein the step of applying the direct affine transform is adapted to transform an intermediate point into an output transformed point in the output triangle, and to determine, for said intermediate point, a contribution to output intensity values of pixels surrounding said output transformed point on the basis of the intermediate intensity value.

6. (Original) A method as claimed in claim 1, further comprising a step of determining lengths of the intermediate rectangle triangle opposite to the hypotenuse which are equal to a power of 2 greater than the length of corresponding edges in the output triangle.

7. (Original) A method as claimed in claim 1, further comprising a step of dividing the output triangle into two sub-triangles before the step of applying the direct affine transform.

8. (Previously Presented) A method as claimed in claim 1, wherein: the step of applying the direct affine transform is adapted to determine an output point and a corresponding output surface in the output triangle from an intermediate point and a corresponding intermediate unitary surface to determine a pixel with integer coordinates belonging to the output surface, and to determine an output vector defined by the output point and the pixel with integer coordinates; and the step of applying the inverse affine transform is adapted to determine an input transformed point in the input triangle from the intermediate point and the output vector, and to filter the input intensity values of texels surrounding said input transformed point so as to derive an output intensity value of the pixel with integer coordinates.

9. (Currently Amended) A device for rendering an output image split into corresponding output triangles including pixels on the basis of textured data of an input image split into input triangles including texels, said device comprising:

means for determining an inverse affine transform for transforming an intermediate rectangle triangle into an input triangle, and for determining a direct affine transform for transforming an intermediate rectangle triangle into an output triangle;

means for applying the inverse affine transform to intermediate points of the intermediate rectangle triangle so as to determine intermediate intensity values

corresponding to said predetermined points on the basis of input intensity values of texels; and

means for applying the direct affine transform to the intermediate points so as to determine output intensity values of pixels on the basis of the intermediate intensity values;

wherein the means for applying the inverse affine transform includes transforming an intermediate point into an input transformed point in the input triangle, and to determining, for said intermediate point, an intermediate intensity value based on a filtering operation of texels surrounding the input transformed point and a distance therefrom; and

wherein said input transformed point in the input triangle is not located on a grid of texels with integer coordinates.

10. (Original) A portable apparatus comprising a device as claimed in claim 9.

11. (Previously Presented) A computer program product comprising machine readable media storing executable code for implementing the method as claimed in claim 1.